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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/084,019

02/25/2002

Edward G. Tiedemann JR.

010475

8463

23696 7590 04/12/2011
QUALCOMM INCORPORATED
5775 MOREHOUSE DR.
SAN DIEGO, CA 92121

EXAMINER

HALIYUR, VENKATESH N

ART UNIT

PAPER NUMBER

2476

NOTIFICATION DATE

DELIVERY MODE

04/12/2011

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

us-docketing@qualcomm.com

**Supplemental
Notice of Allowability**

Application No.

10/084,019

Examiner

VENKATESH HALIYUR

Applicant(s)

TIEDEMANN ET AL.

Art Unit

2476

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 02/24/2011.
2. ☒ The allowed claim(s) is/are 8-9,11,13,15-18,20-21,23,28-29,31-35,37,39-42,44.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
- * Certified copies not received: ____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date ____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date ____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|---|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date ____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date ____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other ____. |

/Venkatesh Haliyur/
Examiner, Art Unit 2476

/Ayaz R. Sheikh/
Supervisory Patent Examiner, Art Unit 2476

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APPLICATION NO./ CONTROL NO.	FILING DATE	FIRST NAMED INVENTOR / PATENT IN REEXAMINATION	ATTORNEY DOCKET NO.
10084019	2/25/2002	TIEDEMANN ET AL.	010475

QUALCOMM INCORPORATED
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EXAMINER

VENKATESH HALIYUR

ART UNIT	PAPER
2476	20110405

DATE MAILED:

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner for Patents

Corrected Issue classification form -changed O.G. Print Claims from 1 to 8

/Ayaz R. Sheikh/
Supervisory Patent Examiner, Art Unit 2476

/Venkatesh Haliyur/
Examiner, Art Unit 2476

1. The following is an examiner's statement of reasons for allowance:

Claims 8-9,11,13,15-18,20-21,23,28-29,31-35,37,39-42,44 are allowed over prior art.

Claims 1-7,10,12,14,19,22,24-27,30,36,38,43 are canceled.

The prior art fails to teach and render obvious the features as claimed in independent claims.

In claims 8, 11, 15, 16, 28:

“estimating a channel condition over a first time window including calculating an average channel condition and a variance channel condition;
determining a first transmission rate for transmission of quality messages and a second transmission rate for transmission of differential indicators based on the comparison;
transmitting differential indicators independently of quality messages at the second transmission rate, wherein the second transmission rate is greater than the first transmission rate.”

In claim 20:

“a controller configured to determine a first transmission rate for transmission of quality messages and a second transmission rate for transmission of differential indicators based on the comparison,

the differential analyzer further configured to generate quality messages at the first transmission rate, t

the differential analyzer further configured to transmit differential indicators at the second transmission rate independently of quality messages, wherein the second transmission rate is greater than the first transmission rate.”

In claims: 13, 18, 31, 41:

“generating quality messages at a first frequency and differential indicators at a second frequency,

wherein the differential indicators track a quality metric between successive quality messages and wherein the second frequency is greater than the first frequency;

transmitting the quality messages at the first frequency and differential indicators at the second frequency.”

In claim: 44

“the quality message periodically providing a quality metric of a forward link, wherein the differential indicators track the quality metric between successive quality messages and wherein the second rate is greater than the first rate;

a memory storage unit operative to store a quality, message received on the reverse link; and a differential analyzer to update the quality message stored in the memory storage unit in response to the differential indicators and the parity check.”

The reasons for allowance is further supported by the inventive concept as claimed in the instant application wherein the transmission of differential indicators is performed independently at a different transmission rate/frequency than that of the transmission of quality messages, since the periodic transmission of quality messages is provided during designated slots and during other slots when the quality message is not transmitted, the receiver may send a differential indicator. The differential indicator is a shorter message used to identify changes in the quality message. The differential indicator may be a 1 bit/slot indicator, but in general is transmitted several times between each quality message transmission. The provision of both the quality message and the differential

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indicator provides the transmitter with frequently updated channel condition information (please refer to the specification [Para 1024])

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to VENKATESH HALIYUR whose telephone number is (571)272-8616. The examiner can normally be reached on Monday thru Friday 10:30AM to 7:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on 571-272-3795. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Venkatesh Haliyur/

Examiner, Art Unit 2476

/Ayaz R. Sheikh/

Supervisory Patent Examiner, Art
Unit 2476